PHYSICS LETTERS B

Abstracted/Indexed in: Current Contents: Physical, Chemical & Earth Sciences/INSPEC/Physics Briefs

Volume 361, numbers 1,2,3,4 **2 November 1995**

Contents

Instructions to authors v

Publisher's announcement ix

Nuclei

Double-beta decay of ^{48}Ca revisited
A. Poves, R.P. Bahukutumbi, K. Langanke and P. Vogel 1

Role of hyperon negative energy sea in nuclear matter
P.J. Ellis, S.B. Parendo and M. Prakash 5

Phasespace structure of antideuteron production in heavy ion collisions
M. Bleicher, C. Spieles, A. Jahns, R. Mattiello, H. Sorge, H. Stöcker and W. Greiner 10

Production of η mesons in 200 A GeV/c S + S and S + Au reactions
WA80 Collaboration 14

First measurement of the tensor analysing power T_{20} in inelastic (d,d') scattering at 0° on ^{1}H and ^{12}C at 4.5 and 5.5 GeV/c
L.S. Azhgirey et al. 21

Evidence for the reducibility of multifragment emission to an elementary binary emission in Xe-induced reactions
K. Tso et al. 25

Particles and fields

Conformal transformation in gravity
I.L. Shapiro and H. Takata 31

Hawking radiation and evaporation of a black hole induced by a Klein–Gordon soliton
S.-W. Kim and W.T. Kim 38

Relic gravitational waves from string cosmology
R. Brustein, M. Gasperini, M. Giovannini and G. Veneziano 45

Matrix dilaton–axion for the heterotic string in three dimensions
D.V. Gal'tsov and O.V. Kechkin 52

Second-quantized mirror symmetry
S. Ferrara, J.A. Harvey, A. Strominger and C. Vafa 59

Fermion mass effects on $\Gamma(Z \to b\bar{b}$ + a light Higgs) in a two-Higgs-doublet model
J. Kalinowski and M. Krawczyk 66

Global anomalies and the gauge-boson equivalence theorem
J.F. Donoghue and J. Tandean 69

On the relativistic field theory model of the deuteron
A.N. Ivanov, N.I. Troitskaya, M. Faber and H. Oberhummer 74

General non-perturbative mass gap to first order in $1/V$
L.C.L. Hollenberg, M.P. Wilson and N.S. Witte 81

Lattice QCD on small computers
M. Alford, W. Dimm, G.P. Lepage, G. Hockney and P.B. Mackenzie 87

Matching the HQET to Coulomb-type bound states
A. Pineda and J. Soto 95

A model for the $B \to X_s + \gamma$ decay in the chromomagnetic background
A. Kyatkin 105

Probing the pion sea with π–D Drell-Yan processes
J.T. Londergan, G.Q. Liu, E.N. Rodionov and A.W. Thomas 110

Perturbative gluon resummation of the top-quark production cross section
E.L. Berger and H. Contopanagos 115

QCD tests from $e^+e^- \to I = 1$ hadrons data and implication on the value of α_s from τ-decays
S. Narison 121

(Continued inside)

0370-2693(19951102)361:1/4;1-R

PHYSICS LETTERS B

Abstracted/Indexed in: Current Contents: Physical, Chemical & Earth Sciences/INSPEC/Physics Briefs

Volume 361, numbers 1,2,3,4 **2 November 1995**

Contents

Instructions to authors v

Publisher's announcement ix

Nuclei

Double-beta decay of ^{48}Ca revisited
A. Poves, R.P. Bahukutumbi, K. Langanke and P. Vogel 1

Role of hyperon negative energy sea in nuclear matter
P.J. Ellis, S.B. Parendo and M. Prakash 5

Phasespace structure of antideuteron production in heavy ion collisions
M. Bleicher, C. Spieles, A. Jahns, R. Mattiello, H. Sorge, H. Stöcker and W. Greiner 10

Production of η mesons in 200 A GeV/c S + S and S + Au reactions
WA80 Collaboration 14

First measurement of the tensor analysing power T_{20} in inelastic (d,d') scattering at 0° on ^{1}H and ^{12}C at 4.5 and 5.5 GeV/c
L.S. Azhgirey et al. 21

Evidence for the reducibility of multifragment emission to an elementary binary emission in Xe-induced reactions
K. Tso et al. 25

Particles and fields

Conformal transformation in gravity
I.L. Shapiro and H. Takata 31

Hawking radiation and evaporation of a black hole induced by a Klein–Gordon soliton
S.-W. Kim and W.T. Kim 38

Relic gravitational waves from string cosmology
R. Brustein, M. Gasperini, M. Giovannini and G. Veneziano 45

Matrix dilaton–axion for the heterotic string in three dimensions
D.V. Gal'tsov and O.V. Kechkin 52

Second-quantized mirror symmetry
S. Ferrara, J.A. Harvey, A. Strominger and C. Vafa 59

Fermion mass effects on $\Gamma(Z \to b\bar{b}$ + a light Higgs) in a two-Higgs-doublet model
J. Kalinowski and M. Krawczyk 66

Global anomalies and the gauge-boson equivalence theorem
J.F. Donoghue and J. Tandean 69

On the relativistic field theory model of the deuteron
A.N. Ivanov, N.I. Troitskaya, M. Faber and H. Oberhummer 74

General non-perturbative mass gap to first order in $1/V$
L.C.L. Hollenberg, M.P. Wilson and N.S. Witte 81

Lattice QCD on small computers
M. Alford, W. Dimm, G.P. Lepage, G. Hockney and P.B. Mackenzie 87

Matching the HQET to Coulomb-type bound states
A. Pineda and J. Soto 95

A model for the $B \to X_s + \gamma$ decay in the chromomagnetic background
A. Kyatkin 105

Probing the pion sea with π–D Drell-Yan processes
J.T. Londergan, G.Q. Liu, E.N. Rodionov and A.W. Thomas 110

Perturbative gluon resummation of the top-quark production cross section
E.L. Berger and H. Contopanagos 115

QCD tests from $e^+e^- \to I = 1$ hadrons data and implication on the value of α_s from τ-decays
S. Narison 121

(Continued inside)

0370-2693(19951102)361:1/4;1-R

PHYSICS LETTERS B

Volume 361, numbers 1,2,3,4 **2 November 1995**

Contents

(Continued from page 4 of cover)

Thermal dilepton emission rate in terms of spectral functions
Z. Huang 131

Radiative decay $B \to l\nu\gamma$ in the light cone QCD approach
G. Eilam, I. Halperin and R.R. Mendel 137

Photon energy spectrum in $B \to X_s + \gamma$ and comparison with data
A. Ali and C. Greub 146

On the higher-loop contributions to the axial anomaly
B.A. Faizullaev, M.M. Musakhanov and N.K. Pak 155

Scalar mesons in a relativistic quark model with instanton-induced forces
E. Klempt, B.C. Metsch, C.R. Münz and H.R. Petry 160

An improved theoretical prediction for the 2-jet rate in e^+e^- annihilation
G. Dissertori and M. Schmelling 167

Search for a neutral particle of mass 33.9 MeV in pion decay
M. Daum, R. Frosch, W. Hajdas, M. Janousch, P.-R. Kettle, St. Ritt and Z.G. Zhao 179

Measurement of the lifetime of Pb^{52+}, Pb^{53+} and Pb^{54+} beams at 4.2 MeV per nucleon subject to electron cooling
S. Baird et al. 184

E/ι decays to $K\bar{K}\pi$ in $\bar{p}p$ annihilation at rest
OBELIX Collaboration 187

A study of single photon production in e^+e^- collisions at $\sqrt{s} = 58$ GeV with the TOPAZ detector at TRISTAN
TOPAZ Collaboration 199

Measurement of $\Delta^{++}(1232)$ production in hadronic Z decays
DELPHI Collaboration 207

Measurement of the B_s^0 lifetime and production rate with $D_s^- \ell^+$ combinations in Z decays
ALEPH Collaboration 221

Errata 234

Author index to volume 361 237